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动物分类学报

DESCRIPTIONS OF TWO NEW SPECIES OF SPHEGINA (DIPTERA, SYRPHIDAE) FROM CHINA

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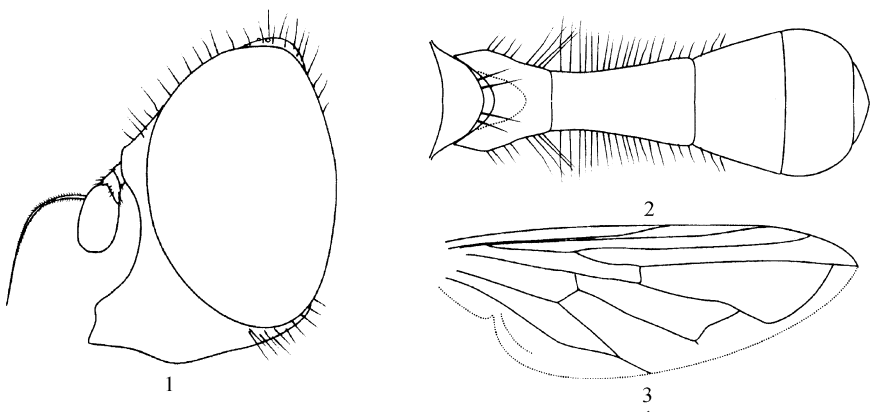
Abstract This paper describes two new species of *Sphegina* from Qinling Mountain, Shaanxi Province; namely *Sphegina quadrisetae* sp. nov. and *Sphegina taibaishanensis* sp. nov. Type specimens are deposited in Bio-resources Key Laboratory of Shaanxi Province, Shaanxi University of Technology, Hanzhong, Shaanxi Province, China.

Key words Diptera, Syrphidae, *Sphegina*, new species, Qinling Mountain.

Sphegina quadrisetae **sp. nov.** (Figs. 1-3)

Male. Eyes bare, dichoptic, distance between compound eyes on vertex about 1/3 of head in width. Vertex and frons black, covered with black hairs. Ocellar triangle slightly convex, distance between lateral ocelli equal about 1/3 of vertex in width. Frons almost parallel-sided, with frontal lunule fuscorufous. Occiput narrow, with upper part of hind margin slightly embowed forwards. Face concave deeply below frontal prominence in profile, with oral margin prominent forward, central knob absent. Face black, covered with short yellow hairs below eyes, oral margin yellow brown. Cheek black with long yellowish brown hairs thinly. Antennae black, dorsal and ventral parts of basal 2 segments covered with black hairs, the first flagellomere oval, longer than its wide. Arista black, long, clothed with pubescence.

Scutum convex, shining black, clothed with short dark brown hairs thinly. Scutellum shining black, with long fulvous hairs sparsely and 4 long black bristles on hind margin. Pleura of mesothorax shining black, except connections of pleural pieces dark brown. Metasternum with straight hind margin between hind coxa. Legs orange yellow, clothed with short fulvous hairs sparsely. Tarsomeres 4 and 5 of fore and mid legs black. Apical 2/3 of hind femur, most basal part of tibia and tarsomeres dark brown. Apical 2/3 of hind femur thickened, ventral side with short black seta and a row of 7-8 long seta on each side apically. 1st tarsomere of hind legs thickened, about 2 times of other tarsomeres in depth in lateral view. Wing covered with microchaeta, Sc cell with apical part dark brown, marginal cell open, vein r_{4+5} straight, r-m before middle of discal cell, upper marginal cross vein upward rapidly, connecting with r_{4+5} at right angle. Hind apical angle of 1st posterior



Figs 1-3. *Sphegina quadrisetae* sp. nov., male. 1. Head, lateral view. 2. Scutellum and abdomen, dorsal view. 3. Right wing.

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cell orbicular obtusely. Lower marginal cross vein connected with m_{1+2} at acute angle, with a slight concave inward at middle. Discal cell with small appending veinlet on outside of hind apical angle.

Abdomen dark brown, covered with sparse yellowish white hairs, especially on lateral margins. Tergite 1 with long yellowish white hairs laterally and long fulvous bristly hairs on hind part of margins. Tergite 2 contracted in petioliform, in narrowest part about half of the broadest of abdomen. Abdomen widened gradually backwards from tergite 3, and the broadest portion on basal parts of tergite 4. Tergtie 2 and basal parts of tergite 3 with long yellowish brown hairs laterally.

Length of body 8 mm, length of wing 6 mm.

Female: unknown.

Holotype ♂, Honghe Valley (34° 04′ N, 107° 45′ E; 1 000 m), Meixian County, Shaanxi Province, 5 Sep. 2002, collected by HUO Ke-Ke.

The species differs from other species of the genus in scutellum with 4 long black marginal bristles.

Etymology. The specific epithet is derived from the Latin *quadric + seta*, referring to hind margin of scutellum with 4 long bristles.

Sphegina taibaishanensis **sp. nov.** (Figs. 4-13)

Male. Dichoptic, compound eyes bare. Distance of vertex between eyes equal about 1/5 of head in width. Vertex black with rare short fulvous hairs, sunken in middle part, lower than level of compound eyes. Ocellar triangle slightly convex, distance between lateral ocelli equal about 1/3 of vertex. Frons black with rare short fulvous hairs, with parallel sides, frontal lunule fuscorufous. Occiput narrow, with upper part of hind margin embowed slightly forwards. Face deeply concave below antennal prominence in profile, black, covered with white powder and short yellow hairs on lateral parts below of eyes, central knob absent. Oral margin black, prominent forwards. Cheeks black with long fulvous hairs. Antennae black, basal 2 segments with black hairs on dorsal and ventral sides, the first flagellomere shortly rounded, almost equal segment 2 in length and shorter than its wide. Arista black, long and bare.

Scutum of mesothorax arched, black, shiny, except postpronotal lobe and postalar callus dark brown, covered with short fulvous hairs sparsely, with a pair of distinct grey stripes extending to hind margin of postsutural scutum in middle part. Scutellum black, shiny, covered with short fulvous hairs rarely and 2 long bristles on hind margin. Pleura black, shiny, except connections of pleural pieces dark brown, covered with grey dusting and rare short fulvous hairs. Metasternum prominent backwards and downwards, with hind margin straight. Legs black with short fulvous hairs. Fore femur with apical parts and fore tibia with basal 1/3 fulvous, tarsomeres with basal 3 segments yellowish and apical 2 segments black. Middle leg is similar to fore leg. Hind legs with basal parts of femur and basal 1/3 of tibia yellow, tarsomeres 2-3 dark brown. Hind femur thickened in apical 2/3, ventral side with short black seta and a row of 7-8 long seta on each lateral side apically. Wing covered with microchaetae, stigma dark. Sc cell with apical part dark brown, marginal cell open, vein r_{4+5} straight, r-m before middle of discal cell, upper marginal cross vein upward rapidly, connecting with r_{4+5} at right angle. Hind apical angle of 1st posterior cell orbicular obtusely. Lower marginal cross vein connected with m_{1+2} at acute angle.

Abdomen black, with metallic blue reflection, covered with rare yellowish white hairs, especially on lateral margin. Tergite 1 covered with long yellowish white hairs laterally and 4 long, fulvous bristles on posterior part of lateral margin. Tergite 2 covered with long, yellowish white hairs on basal part laterally, elongated, contracted in petioliform, about 2 times of tergite 2 in length, in narrowest part about 1/3 of the broadest on hind margin of tergite 3. Abdomen clubbed, broadened gradually from tergite 3, the broadest part on hind margin of tergite 3.

Male genitalia. Dark brown, asymmetry. Epandrium swollen laterally, with left side smaller than the right side. Cerci yellow brown basally, except apical part black, covered with long, yellow hairs dorsally and short black seta apically. Ventral margin of left cercus prominent near basal part. Right cercus narrow, elongate, obtuse apically, bent basally. Surstyli complex, left surstylus trilobed in profile, upper and middle lobe covered with short yellow hairs, right surtylus bilobed in profile, upper lobe elongate, bent apically and covered with yellow hairs, between upper and lower lobes there is a broad, prominent flake covered with yellow hairs. Hypandrium yellow brown, columnar, swollen at basal half, apical half covered with very short black seta ventrally, hind ventral margin with lingula. Superior lobe connected with hypandrium, with apical part obtuse. Aedeagus as in Figs. 12 and 13.

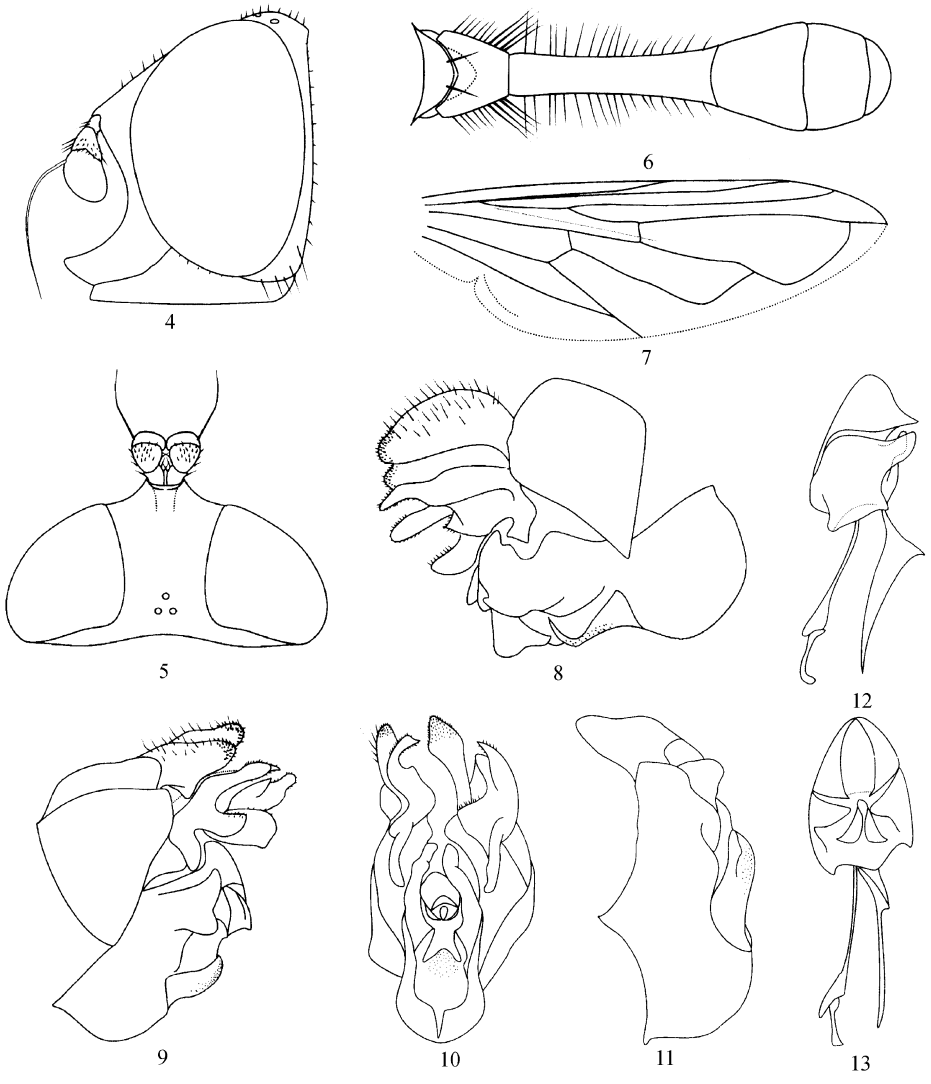
Length of body 8 mm, length of wing 6 mm.

Female: unknown.

Holotype ♂, Taibai Mountain (34° 04′ N, 107° 45′ E, 2300 m), Meixian County, Shaanxi Province, 24 July 2003, collected by HUO Ke-Ke.

The species is similar to *Sphegina sibrica* Stack, but differs from the species in male genitalia.

Etymology. The specific epithet is derived from the type locality-Mountain Taibai, Meixian County, Shaanxi Province.



Figs. 4-13. *Sphegina taibaishanensis* sp. nov. male. 4. Head, lateral view. 5. Head, dorsal view. 6. Abdomen, dorsal view. 7. Wing. 8. Male genitalia, right view. 9. Male genitalia, left view. 10. Male genitalia, ventral view. 11. Hypandrium, left view. 12. Aedeagus, in profile. 13. Aedeagus, ventral view.

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中国棒腹蚜蝇属二新种记述 (双翅目, 食蚜蝇科)

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摘 要 记述了采自陕西秦岭山区的棒腹蚜蝇属 2 新种: 四鬃棒腹蚜蝇 *Sphegina quadrisetae* sp. nov. 及太白棒腹蚜蝇 *Sphegina taibaishanensis* sp. nov.。模式标本保存于陕西理工学院陕西省资源生物重点实验室。

1 四鬃棒腹蚜蝇, 新种 Sphegina quadrisetae **sp. nov.** (图 1~3)

本种以其小盾片后缘具 4 根黑色长鬃而明显区别于本属的其它种。雌性未知。

♂ 体长 8 mm, 翅长 6 mm。

正模 ♂, 眉县 (红河谷, 海拔 2 000 m), 2002-09-05, 霍科科采。

2 太白棒腹蚜蝇, 新种 Sphegina taibaishanensis **sp. nov.** (图 4~13)

本种外形上近似 *Sphegina sibrica* Stack, 但新种外生殖器不对称, 结构复杂, 与 *Sphegina sibrica* Stack 显著不同。

雌性 未知。

♂体长 8 mm, 翅长 6 mm。

正模 ♂, 眉县 (太白山, 海拔 2 300 m), 2003-07-24, 霍科科采。

关键词 双翅目, 食蚜蝇科, 棒腹蚜蝇属, 新种, 秦岭山区.
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